

Joshua Lederberg

Israel Fails to Use Science Reservoir for Its Own Good

REHOVOTH, Israel—Like many other centers of scholarship, this provincial town would be utterly undistinguished except for the Weizmann Institute of Science. This world-famous center for basic scientific research is a memorial to Chaim Weizmann, the first President of Israel, who played a pre-eminent role in the movement for an Israeli state between the great wars.

His research in fermentation chemistry had been an essential contribution to British technological success in the chemistry of explosives manufacture during World War I. This personal role played a significant part in the historic Balfour Declaration, whose 50th anniversary is being celebrated this week and which was the foundation of the British commitment to the establishment of a Jewish nation in Palestine.

In an immediate historic sense, then, science played an important role in the establishment of Israel. That tradition is magnificently sustained in the Weizmann Institute, which justifies a large part of Israel's scientific reputation in the world. It is also an important center of graduate training in sciences; indeed, Israel now trains more Ph.D.s per capita than does the United States.

THIS DAZZLING reputation can, however, be quite misleading. A scientific visitor will, of course, be deeply impressed by this one Institute, but he will have to look hard to find a balanced development of science and technology in Israel.

The country has, for example, an excellent technological base in electronics, but this is almost totally committed to national defense and there is a negligible level of exports in this and other technological fields for which Israel is remarkably well endowed in its resources of educated manpower.

A closer look will also show that the educational picture is not so luminous, again owing in large part to the bleeding of all resources for national security. The country still cannot afford universal compulsory education beyond primary school and the resulting tuition costs for secondary school widen a serious gap between the middle-class European population and the 40 per cent of Asiatic Jews who have still to be absorbed into the fundamental levels of modern industrial society.

Most of this immigration has come from Arabic-speaking countries. Israel may perhaps be faulted for having given a second priority to the rehabilitation of displaced Moslem Arabs, but no judgment of that fault would be fair if it over looked the enormous burden of resettlement and assimilation of these Jewish refugees.

It is hard to imagine any place in the world faced with a higher concentration if not scope of human and economic problems, and there are enormous efforts in train to deal with them. It is a saving feature that the land is small and the populations small enough to be welded together for meaningful national purposes.

Israel may then be viewed as a laboratory for experiments in national economic development on a practical scale that would be utterly submerged by the over-all immensity of human needs in, say, India.

WITH ALL its enormous strides, Israel, as is too painfully evident, still fails to make much constructive use of its scientific technological resources. There is too large a gap between a center of excellence like the Weizmann Institute and techical planning for the nation.

This problem is often enough perceived but the wrong remedy too often proposed: to dissipate the aspirations for scientific excellence by regarding basic research as competitive with the technology for economic development. In stead, it should provide the intellectual leadership for it.